



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,260	06/23/2003	Eric Berg	OIC0050US	1943
60/975 7590 08/28/2008 CAMPBELL STEPHENSON LLP 11401 CENTURY OAKS TERRACE BLDG. H, SUITE 250 AUSTIN, TX 78758				
			EXAMINER	
			SAINDON, WILLIAM V	
			ART UNIT	PAPER NUMBER
			3623	
			MAIL DATE	DELIVERY MODE
			08/28/2008 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/602,260

Applicant(s)

BERG ET AL.

Examiner

William V. Saindon

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 1/30/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following FINAL Office Action is in response to Applicant's submission received May 15, 2008. Claims 1, 9, 20-31, and 36 have been amended. No claims have been added or canceled. Therefore, claims 1-40 are pending.

Response to Amendment

2. Applicant's amendments to the claims are acknowledged.

3. The 35 USC § 101 rejection of claims 20-30 is not withdrawn in light of Applicant's amendments. The newly recited "computer program product" does not fall within one of the enumerated statutory classes because it includes software and/or signals. Software is descriptive material per se, and is therefore non-statutory. Please refer to the § 101 rejection below.

Response to Arguments

4. Applicant's arguments have been considered but are moot in view of the new grounds of rejection necessitated by amendment.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 20-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As to claims 20-30, the claims are directed to a computer program product (i.e. software) encoded in a "computer readable storage media." In paragraph 24, this machine readable medium includes "propagated signals," which are non-statutory. Therefore, the claims are directed to non-statutory signals.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Juan Sanchez Diaz et al., "From User Requirements to User Interfaces: A Methodological Approach," 13th Int. Conf., CAiSE 2001, in 2068 Lecture Notes in Comp. Sci. 60 (K.R. Dittirch, et al. eds., Springer June 4-8, 2001).

As to claim 1, Diaz discloses:

identifying a business process (see p. 64, noting the process in Fig. 3 provides an overview of the paper, which is directed towards software engineering, the software requirements being the business process);

identifying an application product, wherein the application product pertains to the business process (id., noting the software is the application); and

associating a business process model with a plurality of views, wherein the business process model pertains to the application product, the application product is

configured to present the plurality of views, and the plurality of views illustrates the business process within the application product (id., noting that user interface prototypes are generated based on the model, user interfaces being views illustrating the requirements of the software).

As to claim 2, Diaz discloses each of the plurality of views is an image representing one of a plurality of user interfaces defined by the application product (see Fig. 7, noting a sample user interface form of the application).

As to claim 3, Diaz discloses creating the business process model for the application product using data from an external file (see Table 1, noting the model uses this data for defining the application product, the table being an external file).

As to claim 4, Diaz discloses the business process model is created in a modeling language (see p. 66, noting the use case model uses UML, a standard and well-known modeling language).

As to claim 5, Diaz discloses the business process model comprises graphical representations of a plurality of activities within the business process (see Fig. 7, noting the UI is graphical and is used to represent activities of the requirements).

As to claim 6, Diaz discloses displaying the business process model with the plurality of views to the user (see Fig. 7, noting user interfaces are viewed by a user).

As to claim 7, Diaz discloses:
creating the plurality of views corresponding to a plurality of user interfaces defined in the application product (see Figs. 6 & 7 and accompanying text, noting that the interfaces specified in Fig. 6 are displayed in Fig. 7);

storing an identifier of each of the plurality of views in a repository (see id., noting that code is stored in order to be run); and

associating, in the repository, the identifier of each of the plurality of views with at least one of a plurality of activities represented in the business process model (see id., noting that each interface has a name in the figures).

As to claim 8, Flores discloses the application product is a standard application product defined for a specific industry (see Fig. 2, noting payment is depicted. Other figures define other applications).

Claims 9-11 recite claim language not patentably distinct from claims 1-3 and are therefore rejected for similar reasons.

As to claim 15, Flores discloses:

receiving a user request to navigate to one of the plurality of views in the application product; determining a view identifier; and passing a command to the application product to trigger display of a user interface associated with the view identifier in execution mode (see Fig. 7, noting that the "search customer" view is provided upon request to view the prototype).

As to claim 16, Flores discloses:

creating a first set of business requirements using the business process model; and transferring the first set of business requirements to a business requirement database (see e.g. Table 1, a database storing business requirements).

As to claim 18, Diaz discloses maintaining existing relationships between components of the business process model when creating the first set of business requirements (see Fig. 5, noting relationships are maintained according to the MSC).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 12-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diaz as applied to claims 9 and 16 above, and further in view of Examiner's Official Notice.

As to claims 12-14 and 17, Diaz fails to explicitly disclose deleting, adding, and replacing one of the plurality of views in response to a user request [note that the

modifying of claim 17 would fall under 'replacing']. However, the Examiner takes Official Notice that it is old and well known to edit things using standard cut, copy, paste, and delete. Editing is a known method for improving things by allowing flexibility in creating processes. The use of editing is predictable to one of ordinary skill in the art because everyone is familiar with its concepts. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to apply standard editing practices to a process in order for that process to be modified when things change.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mohammed Elkoutbi et al., "Generating User Interface Prototypes from Scenarios," Proceedings of the 4th IEEE International Symposium on Requirements Engineering, p. 150 (1999), disclose a method of deriving user interfaces of a system (see e.g. Fig. 3).

Mohammed Elkoutbi & Rudolf K. Keller, "User Interface Prototyping Based on UML Scenarios and High-Level Petri Nets," ICATPN 2000, LNCS 1825, p. 166 (M. Nielsen & D. Simpson, eds., Springer 2000), disclose a method of defining the requirements of an application and creating prototype views of the interfaces.

Andreas Homrighausen et al., "Round-Trip Prototyping for the Validation of Requirements Specifications," REFSQ 2001 (June 2001), disclose a method of defining user interface views (see e.g. Figs. 6 & 7).

Andreas Homrighausen et al., "Round-Trip Prototyping Based on Integrated Functional and User Interface Requirements Specifications," 7 Requirements Engineering 34 (2002), disclose a more detailed example of the above Homrighausen et al. reference, for example the more detailed flowchart-to-interface software in Fig. 8.

James Lin et al., "DENIM: Finding a Tighter Fit Between Tools and Practice for Web Site Design," CHI Letters, vol. 2, iss. 1, p. 510 (1-6 April 2000), disclose software called DENIM used to "storyboard" the user interface for websites. As disclosed, storyboarding is a well-known process for drawing a process, then drawing images corresponding to various steps in the process to illustrate what the user will see at that point in time.

Hongzheng "Cindy" Lu, "A User Interface Design Requirement Document: What's Wrong With It?," Proc. Human Factors and Ergonomics Society, 295 (2000), discloses a general process for generating user interfaces, including the creation of mockups to display what the interface will look like.

Mark W. Newman & James A. Landay, "Sitemaps, Storyboards, and Specifications: A Sketch of Web Site Design Practice," DIS 2000 (ACM 2000), disclose an overview of the storyboarding process as it relates to web site interface design, and introduces DENIM.

Nuno Jardim Nunes & Joao Falcao e Cunha, "Wisdom - Whitewater Interactive System Development with Object Models," in "Object Modeling and User Interface Design," 197 (Mark Van Harmelen, ed., Addison-Wesley Longman 2001), disclose the WISDOM method that uses UML to create user interfaces (see e.g. Figs. 5, 7, and 17).

Nuno J. Nunes & Joao F. Cunha, "Wisdom: A Software Engineering Method for Small Software Development Companies," IEEE Software (Sep/Oct 2000), disclose Wisdom in more detail, especially the interface for transforming the design view model into the GUI in Fig. 4.

Cifra et al. (US 2004/0221238) disclose a tool for automatic generation of GUIs given the desired functionality of the program.

Isreal et al. (US 6,330,007) disclose a GUI prototyping and specifying tool.

Rothwein et al. (US 2004/0001092) disclose a method for prototyping GUIs.

Scandura (US 6,275,976) discloses an automated method for building software given an input of the specification for the software.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Saindon whose telephone number is (571)270-3026. The examiner can normally be reached on M-F 7:30-5; alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/wvs/

/Beth V. Boswell/

Supervisory Patent Examiner, Art Unit 3623